UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,807	07/14/2003	Shao-Chueh Hu	BHT-3212-31	4169

7590 01/24/2006	EXAMINER	
TROXELL LAW OFFICE PLLC	GOMA, TAWFIK A	
SUITE 1404		
5205 LEESBURG PIKE	ART UNIT	PAPER NUMBER
FALLS CHURCH, VA 22041	2653	

DATE MAILED: 01/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/617,807	HU, SHAO-CHUEH
	Examiner	**Art Unit**	
	Tawfik Goma	2653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *14 July 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some *   c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Objections

Claim 6 is objected to because of the following informalities: The language "both of them" render the claim unclear.   Appropriate correction is required.

Claim 1 is objected to because of the following informalities. The claim recites, "said coded audio data," in line 7 of the claim. The claim does not define coded audio data prior to this recitation, and only recites, "coded audio data file." The claim should be corrected to read, "coded audio data" rather than "said coded audio data" in order to render the claim proper.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 10 and 19 are rejected to for the following reasons: Claim 10 recites that a "normal" reading and buffering procedure is first executed. The term "a normal reading and buffering procedures" is broad and indefinite language. The normal procedure is not defined previously in the claim. Further in regard to claims 10 and 19, the claim language is not grammatically proper. The claim recites, "number of blocks that distances between....", which should be corrected. The "buffer unit" is also defined as one unit that composes only block of information as understood from claims 1 and 11,

and as such a distance corresponding to the number of blocks within the unit would not

be possible to measure. Appropriate clarification is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 4-6, 8-9, 11-13, and 15-18 and 20 are rejected under 35

U.S.C. 102(b) as being anticipated by Ado (US Patent 6216201)

Regarding claim 1, Ado discloses a method for reading a coded audio data file in

an optical storage medium and buffering the audio data file to a buffer memory (fig. 4©

and col. 5 lines 55-64), said audio data file comprising a plurality of blocks which are

stored sequentially in a plurality of storing units in said optical storage medium (fig. 2

and col. 2 lines 36-42)), each block divided into a subcode block and a corresponding

main data block (fig. 4(C)), said subcode block comprising a plurality of coded

subcodes (col. 2 lines 10-22), said subcodes comprising an address for each

corresponding block (col. 2 lines 18-22) , said main data block correspondingly

comprising said coded audio data (col. 2 lines 31-35), the method comprising following

steps: (a) designating a starting block where buffering starts, decoding via a subcode

decoding procedure to obtain said subcodes in said subcode block, and searching for

said starting block in said blocks in said optical storage medium (col. 2 lines 18-22 and

col. 8 lines 43-46) ; (b) when said starting block is searched, triggering a main data

decoding procedure to correspondingly decode said starting block and said main data

blocks in later blocks (col. 8 lines 47-51), then sequentially buffering decoded audio

data respectively in a plurality of corresponding buffer units in said buffer memory after

performing decoding (col. 8 lines 51-61); and (c) according to the timing when said

main data decoding procedure is triggered, deciding the timing when said decoded

subcodes should be buffered to said buffer memory (col. 8 lines 47-51 and col. 9 lines

5-8), in order that said subcodes and corresponding audio data which belong to the

same block before decoding can be buffered to the same buffer unit after respectively

decoded (fig. 6). Ado discloses that the sync block is used to search for the starting

block (Trn0), and that the sync is located in the subcode of each block, which implies

that the subcodes of every block are decoded during the searching process. Ado

further discloses that the when the decoding of the main data is triggered, the page

location in the buffer data is reset for both the subcode and the main data such that

they are buffered to the same location. When the main data of the block Trn0 is

finished, the decoding of the main data of the next block (Trn1) starts and the page

numbers are incremented to 1 for the subcode and main data information (col. 9 lines

5-8) and buffering of the subcode information of the next block (Trn1) begins along with

buffering of the main data of the next block (Trn1) (col. 9 lines 14-23) based on a timing

signal BSYNC (fig. 6).

Regarding claim 2, Ado further discloses wherein in the step (b), after said

starting block is searched, a matching flag will be emitted to a subcode buffer controller

and a main data buffer controller (X, Trn0, fig. 6), so as to respectively trigger the later

subcode decoding procedure of said subcode buffer controller and trigger said main

data decoding procedure of said main data buffer controller (col. 8 lines 49-61 and 35,

37, fig. 6). Fig. 6 clearly shows the later buffering of the decoded starting subcode

(Trn0) in unit 37.

Regarding claim 4, Ado inherently discloses an address control unit that emits

the matching flag (X, Trn0, fig. 6) in order to perform the search process disclosed (col.

2 lines 18-22 and col. 8 lines 43-46).

Regarding claim 5, Ado further discloses wherein said buffer memory comprises

said buffer unit to correspondingly store said decoded subcodes and audio data (col. 8

lines 47-61). Ado discloses that the buffer memory comprises a "page" that stores the

main data and the corresponding subcode information for each block.

Regarding claim 6, Ado further discloses wherein each of said buffer unit

comprises a subcode unit and a main data unit; said subcode unit and said main data

unit both of them are used to respectively store the decoded subcodes and audio data

(fig. 6).

Regarding claim 8, Ado further discloses wherein an optical storage device

proceeds said method; said optical storage device connects to a computer host and

receives a reading command from said computer host to proceed said method (19, fig.

1).

Regarding claim 9, Ado further discloses wherein the block which said reading

command asks to read is defined as a target block (TRN0 and col. 8 lines 47-51), and

said address control unit can decide the starting block via a starting block deciding

procedure (col. 2 lines 16-22).

Regarding claims 11, claim 11 is rejected for the same reasons as claims 1 and 4

above. Ado further discloses a subcode buffer controller (37, fig. 11) and a main data

buffer controller (35, fig. 11).

Regarding claim 12, claim 12 is rejected for the same reasons as claim 1 above.

Regarding claim 13, claim 13 is rejected for the same reasons as claim 2 above.

Regarding claim 15, claim 15 is rejected for the same reasons as claim 5 above.

Regarding claim 16, claim 16 is rejected for the same reasons as claim 6 above.

Regarding claim 17, claim 15 is rejected for the same reasons as claim 8 above.

Regarding claim 18, claim 18 is rejected for the same reasons as claim 9 above.

Regarding claim 20, Ado further discloses a compact disc medium with digital

audio format (fig. 4(C)).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

Claims 3 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Ado et al (US Patent 6216201) in view of Tran et al (US Patent 6198705). Regarding

claims 3 and 14, Ado discloses everything claimed as applied above. Ado fails to

disclose wherein at least one block is distanced between where said main data buffer

controller receives said matching flag and where said main data buffer controller

triggers said main data decoding procedure; the number of said distanced blocks is

decided by the timing of triggering said main data decoding procedure. In the same

field of endeavor, Tran (US Patent 6198705) discloses where a physical target (col. 7

lines 35-41) and a virtual target is at least one block distance away from the desired

data that is buffered to memory (fig. 3b and col. 5 lines 58-67 thru col. 6 lines 1-5). It

would have been obvious to one of ordinary skill in the art to modify the buffering

method disclosed by Ado to decode the main data at least one block after a matching

flag is detected as taught by Tran. The rationale is as follows: One of ordinary skill in

the art would have been motivated to begin buffering the main data at least one block

distance from a matching flag detection in order to eliminate errors caused by reading at

high speeds in the disc drive (see Tran col. 2 lines 55-64).

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ado et al

(US Patent 6216201) in view of Packer (US Patent 6058453). Regarding claim 7, Ado

discloses where the buffer memory is RAM memory (17, fig. 1, fig. 11). Ado fails to

disclose where the buffer memory is DRAM memory. In the same field of endeavor,

Packer discloses where buffer memory can be DRAM memory (col. 7, lines 48-51). It

would have been obvious to one of ordinary skill in the art to modify the RAM buffer

memory used by Ado with the DRAM memory taught by packer. The rationale is as

follows: One of ordinary skill in the art would have been motivated to use DRAM

memory rather than RAM memory in order increase memory capacity and reduce cost.

Claims 10 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ado et al (US Patent 6216201) in view of Tran et al (US Patent 6198705). Regarding claims 10 and 19, claims 10 and 19 are rejected under 112 2nd paragraph as above. The examiner for clarification reinterprets claims 10 and 19, as follows. Ado discloses everything claimed as applied above (see 102 rejections of claims 9 and 18 above). Ado fails to disclose where the optical storage device first executes a normal reading and buffering procedures to check the number of blocks between the subcodes and their corresponding audio data stored in the buffer units as compared to their location on the optical disc, and then the optical storage device counts the number counts of blocks back from the target block every time when reading said optical storage medium to decide the starting block. In the same field of endeavor, Tran discloses the method claimed in claims 10 and 19 (col. 5 lines 29-47)
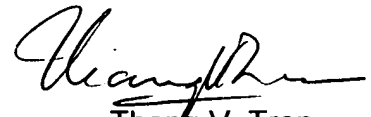
Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Packer (US Patent 6373794) discloses a method and apparatus for delayed block release in a compact disc. Yamawaki (US Patent 5604646) discloses a data error correction method for an optical disc buffering apparatus. Fang et al (US Patent 6539518) discloses an auto-disc controller capable of correcting various buffering errors.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tawfik Goma whose telephone number is (571) 272-4206. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, William Korzuch can be reached on (571) 272-7589. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Tawfik Goma
1/18/2006

Thang V. Tran
Primary Examiner
1/18/2006